



National Advisory General Medical Sciences Council

September 17, 2020

Jon R. Lorsch, Ph.D., Director National Institute of General Medical Sciences



New Council Members

Laura F. Gibson, Ph.D.

Sr. Associate Vice President for Research & Graduate Education Associate Dean for Research, School of Medicine Alexander B. Osborn Distinguished Professor Hematological Malignancies West Virginia University



Danielle Li, Ph.D.
 Associate Professor
 Technology, Innovation, Entrepreneurship, and Strategy Group
 Massachusetts Institute of Technology
 Sloan School of Management



Pamela Stacks, Ph.D.
 Associate Vice President, Research
 Division of Research and Innovation
 San Jose State University



Ad hoc Council Participants

Jeffrey Sun, J.D., Ph.D.

Professor of Higher Education & Affiliate Professor of Law

Department of Educational Leadership, Evaluation, & Organizational Development

Associate Dean for Innovation & Strategic Partnerships College of Education & Human Development University of Louisville



Professor and Interim Chair of Pediatrics Interim Director, Cincinnati Children's Research Foundation

Interim Chief Medical Officer, Cincinnati Children's Hospital Medical Center





Early Career Investigator *Ad Hoc* Council Participants

- David Koes, Ph.D.
 Assistant Professor
 Department of Computational & Systems Biology
 University of Pittsburgh
- Rachel Patton McCord, Ph.D.
 Assistant Professor
 Department of Biochemistry & Cellular and Molecular Biology
 University of Tennessee





New Hires

- Kadir Aslan, Ph.D., Program Director, Biochemistry and Bio-related Chemistry Branch, Division of Pharmacology, Physiology, and Biological Chemistry (Formerly Morgan State University)
- Julia Barthold, M.D., Program Director, Research Advancement Programs Branch, Division for Research Capacity Building (Formerly CSR)
- Thomas Beard, Grants Management Specialist, Grants Administration Branch, Division of Extramural Activities (Formerly Grant Thornton, LLP)
- Sydella Blatch, Ph.D., Program Director, Undergraduate and Predoctoral Training Branch, Division of Training, Workforce Development, and Diversity (Formerly NIAID)







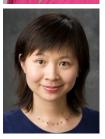


New Hires (cont.)

- Susy Correra-Salazar, IT Specialist, Information Resources Management Branch, Division of Management (Formerly NIAID)
- Andrea Keane-Myers, Ph.D., Chief, Genetic Mechanisms Branch, Division of Genetics, and Molecular, Cellular, and Developmental Biology (Formerly CSR)
- Yang Zhou, Ph.D., Program Director, Networks and Development Programs Branch, Division for Research Capacity Building (Formerly CSR)







Departures

- Lisa Hechtman, Ph.D., Statistician, Division of Data Integration, Modeling, and Analytics (move to Small Business Administration)
- Haluk Resat, Ph.D., Program Director, Division of Biophysics, Biomedical Technology, and Computational Biosciences (move to Common Fund Data Ecosystem)
- Christina Rinaldi, Grants Management Specialist, Division of Extramural Activities (move to NIAID)
- Claire Schulkey, Ph.D., Data Scientist, Division of Data Integration, Modeling, and Analytics (move to NIH All of Us Research Program)









In Memoriam

Marvin Cassman, Ph.D.

- Joined NIGMS in 1975 as a health scientist administrator in what was then the Cellular and Molecular Basis of Disease Program
- Advanced to become NIGMS' deputy director, acting director, and from 1996 to 2002, director

Ward Smith, Ph.D.

- Joined NIGMS in 2007 as a program director in the former Division of Cell Biology and Biophysics
- Was serving as Biomedical Technology Branch Chief, Division of Biophysics, Biomedical Technology, and Computational Biology





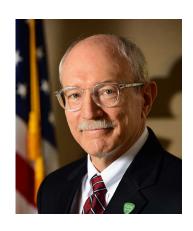
Upcoming NIH Departure

Hannah A. Valantine, M.D.

- Retiring as NIH Chief Officer for Scientific Workforce Diversity in late September
- Joined NIH in 2014 and has led a comprehensive strategy for promoting inclusiveness and equity throughout the biomedical research enterprise
- Numerous accomplishments include establishing the Distinguished Scholars Program, co-leading the Diversity Program Consortium, and implementing the first NIH Workplace Climate and Harassment Survey



New NIH Institute Directors



Rick Woychik, Ph.D.

NIEHS

(NIEHS, Jackson Labs)



Shannon N. Zenk, Ph.D., M.P.H., R.N., F.A.A.N.

NINR

(U. Illinois, Chicago)



Michael F. Chiang, M.D.

NEI

(OHSU)



New NIH Institute Directors



Rena N. D'Souza, D.D.S., M.S., Ph.D. NIDCR (University of Utah)



Lindsey A. Criswell, M.D., M.P.H., D.Sc. NIAMS (UCSF)

NIGMS Job Vacancies

- Chief, Biomedical Technology Branch
 Division of Biophysics, Biomedical Technology, and Computational Biosciences
- Program Director positions:

Pharmacological and Physiological Sciences Branch, Division of Pharmacology, Physiology, and Biological Chemistry

Networks and Development Programs Branch, Division for Research Capacity Building

Bioinformatics and Computational Biology Branch, Division of Biophysics, Biomedical Technology, and Computational Biosciences

 Positions open on September 21 and close on September 30 as part of NIH's global recruitment for health science administrators

https://nigms.nih.gov/about/job_vacancies



NIGMS Grantee Receives Top U.S. Mentoring Award

2020 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring

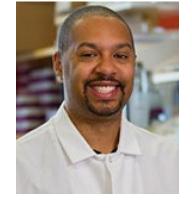




Angela Wandinger-Ness, Ph.D.
IRACDA Program Director
University of New Mexico
Health Sciences Center

Upcoming Event: NIGMS Director's Early Career Investigator Lecture

- Michael D. L. Johnson, Ph.D.
 University of Arizona Health Sciences
- "Microbes, Metals, Music, and Lessons in Disproving Your Hypothesis"
- October 14, 2020
 1:00-2:00 p.m. ET



Participate remotely via Zoom or watch on NIH VideoCast

https://www.nigms.nih.gov/news/meetings/ECI

Upcoming Event: NIGMS Stetten Lecture

- Emery N. Brown, Ph.D.
 Institute for Medical Engineering & Science
 Massachusetts Institute of Technology
- "Rethinking General Anesthesia"
- November 18, 2020
 3:00-4:00 p.m. ET



Participate remotely via WebEx or watch on NIH VideoCast

https://www.nigms.nih.gov/news/meetings/stetten

NIGMS Training Webinars on Demand

- Series of 14 webinars held over the summer for students, postdocs, and faculty—now available for viewing on YouTube
- Range of biomedical and career development topics

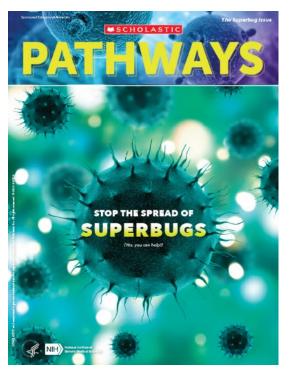


2,664 live views; 4,320 views on YouTube (as of 8/31/20)

https://www.nigms.nih.gov/News/meetings/ Pages/webinars-for-trainees.aspx

Pathways: NIGMS & Scholastic, Inc.

New issue on super bugs coming soon!



- Will reach an estimated 2.5 million middle and high school students and 19,000 teachers across all 50 states
- Student magazine in Scholastic's Science World October issue
- Lesson plans for teachers that map to curricular standards
- Online activities and videos featuring NIGMS-funded scientists and research

http://www.scholastic.com/pathways



New from NIGMS: Virtual Backgrounds

Show off your love of science (or disguise your home office clutter during video calls) with images from the NIGMS Image & Video Gallery



https://biobeat.nigms.nih.gov



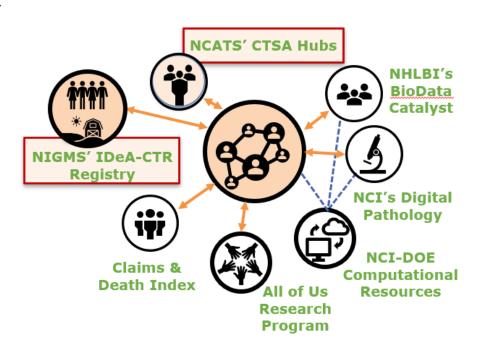
COVID-19 – Urgent Competitive Revisions

- NIGMS issued 2 Notices of Special Interest (<u>NOT-GM-20-025, NOT-GM-20-027</u>) to support areas of critical research need related to COVID-19
- NIGMS has made 22 awards to 21 projects, with an investment of \$7.4M in work focusing on:
 - Research on modeling and forecasting the spread of SARS-CoV-2 and the effects of possible intervention strategies
 - Repurposing of diagnostics or therapeutics currently under development by small businesses for use against COVID-19

IDeA-CTR Patient Data Registry to Address COVID-19 Disparities

- A newly funded consortium of 8 IDeA-CTRs with 9.3 million patient EHRs for mostly rural and/or medically underserved populations (UP) will harmonize and share COVID-19 data
- The Registry is key component of the National COVID Cohort Collaborative (N3C). The data are available for all researchers studying COVID-19
- Supported by NIGMS, NIH Office of Data Science Strategy, and NCATS

National COVID Cohort Collaborative (N3C)



Watch N3C demo video at https://ncats.nih.gov/n3c/about



The IDeA-CTR COVID-19 Registry: Focusing on the Underserved

8 CTRs led by Sally Hodder, MD, of the WVU will collect COVID-19 testing and other clinical data and collaborate with N3C on data harmonization and management

IDeA-CTR	Database Demographics	Unique Patients	# Tested for CoV-2	# Positive Cases
DE	Children: 19.4% Black, 19.8% Latinx	2 M	3600	Unknown
NE	Rural and Aging: includes data from KS, ND, SD	1.4 M	20,000	2,000
LA	Inner City & Rural Disparities: 55% Black	Unknown	55,000	13,000
IVI S	Rural and Obesity: 52.8% Black, 6% multi-racial, Hispanic, Asian, or Choctaw Indian	904,781	21,920	1,968
ME	Rural and Aging: includes data from NH, VT	2 M	Unknown	692
ОК	Disparities: 4% American Indian, 14% Black, 12% Latinx	~ 1 M	11,041	1,452
RI	Longitudinal EHR data for half the state	537,000	80,000	7,000
WV	Economically Disadv., Rural: 9.7% Black, 3.7% Latinx	1.5 M	15,409	555
	Totals as of June 2020	~9.3 M	209,970	26,667

COVID-19 – Fellowship / Career Award Extensions

- As part of the NIH-wide flexibilities offered to institutions affected by COVID-19 (NOT-OD-20-086), NIGMS allowed participants in its individual fellowship and early career award programs (F and K awards) whose grants were ending before October 1, 2020 to request an extension of support with justification
- NIGMS made 35 <u>paid</u> extensions to individual F and K awardees, providing additional supported time for these early career researchers to avoid setbacks in their professional development and career trajectories

Supplements – Training Programs

NIGMS provided 60 supplements in 4 areas to a broad range of training programs (\$4.7m)

Funding Notice	Topic Area	Applications	Funded
NOT-GM-20-016	Lab, chemical, and physical safety	6	4
NOT-GM-20-018	Safe and Inclusive Training Environments	10	10
NOT-GM-20-019	Undergraduate Courses	36	27
NOT-GM-20-020	Enhanced Evaluation Capacity	27	19
Grand Total		79	60

Supplements – Summer Undergraduate Research

- NIGMS issued a Notice of Special Interest (<u>NOT-GM-20-015</u>) to provide opportunities for R01/R35/R37-supported researchers to submit supplement requests for summer undergraduate research experiences
- Despite the effect that COVID-19 had on research institutions nationwide, NIGMS was able to award 43 summer undergraduate research supplements
 - Many did virtual research

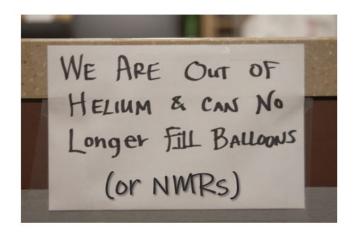
Supplements – Equipment

 Building upon prior popularity and continued need for state-of-the-art equipment in research laboratories, NIGMS re-issued a call for administrative supplement requests to obtain single pieces of equipment that cost up to \$250k (NOT-GM-20-013)

 NIGMS awarded \$41.8m in funds to procure equipment, supporting 385 projects to ensure that researchers have access to critical tools for conducting their work

NIGMS Supplements for He Recovery Systems

- FY20: \$3.0 M for 12 new systems and 2 upgrades
- Each site benefits 2 10 NIGMS-funded researchers as well as scientists funded by other NIH institutes
- Over the 2 years of the supplements, estimated He savings of 140,000 liters/year (~\$2.1 M at current prices)



IDeA States Technology Transfer Accelerator Hubs Highlights

DRIVEN:

Core Business

Supported by NIGMS grant: U13GM 103387

Virtual Meeting

October 5th, 2020, 1-5PM EST

Four hours that can transform your Core's business

<u>Core Business</u> is designed for Core Directors, and introduces helpful business skills to ease management and improve the top and bottom lines of Core Facilities:

- Business Fundamentals
- Value propositions, pricing, and budgeting
- · Risks and Teams
- The "Risk Up Front" method of risk and project management
- Core Support Communities
 - The Association of Biomolecular Resource Facilities (ABRF) and Meenta
- Core Offerings from a Pharma Perspective
- How Pharma views the biomarkers business
 - Marketing Case Study

 Comprehensive analytics for a successful go-to-market strategy

Speakers



Gabor Bethlendy Meenta



Doug Chung Harvard Business School



g Julie Coleman School Celdara Medical



Rick Greenwald



Adam Josephs Celerity Consulting



Yolanda Nesbeth



Jake Reder Celdara Medical



Andrew Vinare ABRF

Register



Engaging Researchers and Innovators for Commercialization at HBCUs (EnRICH)



EnRICH is a human health-focused innovation harvesting and commercialization "pre-accelerator" program for faculty and student innovators at Historically Black Colleges and Universities (HBCUs). The program, "Engaging Researchers and Innovators for Commercialization at HBCUs" (EnRICH), is led by Jackson State University, an urban research HBCU located in Jackson, MS, with support from leadership at XLerateHealth and the University of Kentucky Office of Technology Commercialization.



NIGMS Strategic Plan 2021-2025 Timeline

June 8 - July 31, 2020

 Issued Request for Information (RFI) on new Strategic Plan Framework

August 2020

Analyzed and summarized RFI responses

September-December 2020

 Generation of a draft Strategic Plan, inclusive of implementation strategies and RFI feedback, by NIGMS staff

January 2021

Presentation of draft Strategic Plan to NIGMS Advisory Council

February 2021

Publication of NIGMS' 2021-2025 Strategic Plan

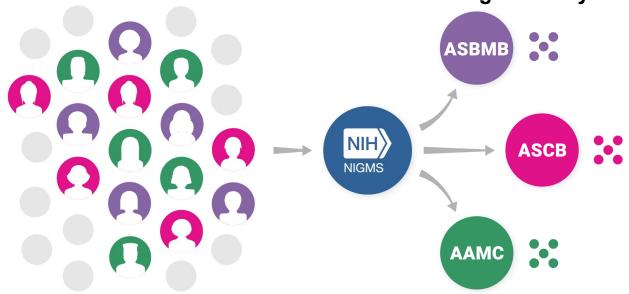


Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC)

Postdoctoral Career Transition Award to Promote Diversity (K99/R00) – PAR-19-343 Institutionally Focused Research Education Cooperative Agreement to Promote Diversity (UE5) – PAR-19-342

MOSAIC K99/R00 Applicants

MOSAIC K99/R00 Scholars Participate in Cohorts Organized by UE5

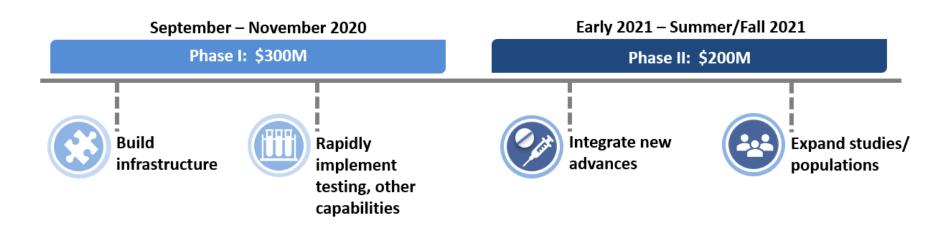


Other ICs Participating in MOSAIC K99/R00: NIBIB, NINR, NIMHD, NHGRI, NIA, NIDA, NIAAA, NIEHS, NIDCD, NIDCR, NHLBI*, NLM*, NIMH*, NCCIH* (*also participating in UE5)



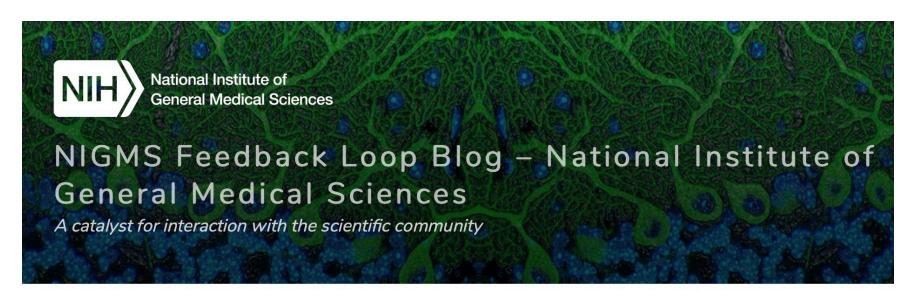
RADx-Underserved Populations (RADx-UP)

- Overarching Goal: Enhance COVID-19 testing among underserved and vulnerable populations across the US
- Develop/create a consortium of community-engaged research projects designed to rapidly implement testing interventions
- Strengthen the available data on disparities in infection rates, disease progression and outcomes, and identify strategies to reduce these disparities in COVID-19 diagnostics





How Do We Change the Culture of the Biomedical Research Enterprise to Make It More Inclusive, Safe and Equitable?

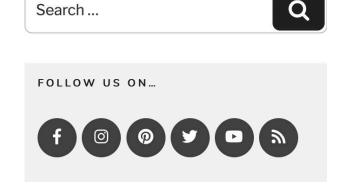


JUNE 10, 2020

What Can We Do to Combat Anti-Black Racism in the Biomedical Research Enterprise?

BY DR. JON LORSCH, DR. KENNETH GIBBS, AND DR. ALISON GAMMIE

20 comments



Questions & Comments

